

CLAIMS

The invention claimed is:

1. An assembly for a multi-section extension ladder, comprising:
 - a roller housing having a length along a central axis and a width, and a plurality of aligned apertures therethrough for rotatably mounting at least one roller therein;
 - at least one roller rotatably mounted in said housing;
 - said roller housing further comprising a roller pad having an opening defining an aperture through which said at least one roller extends; and
 - said roller housing being adapted for pivotal mounting to a ladder section .
2. The assembly of claim 1, wherein said roller and pad comprise a dense polymer.
3. The assembly of claim 1, wherein said roller is flush with or projects slightly beyond an outer surface of said roller pad.
4. The assembly of claim 3, wherein said roller projects through said aperture about 2 millimeters beyond an outer surface of said roller pad.
5. The assembly according to claim 1, wherein said housing is adapted for pivotal mounting at a point approximately central to the length of said axis.
6. The assembly according to claim 4, wherein at least one roller is rotatably mounted in said housing on each side of said pivotal mounting point.
7. The assembly according to claim 5, wherein a pair of rollers is rotatably mounted in said housing on each side of said pivotal mounting point.

8. The assembly of claim 1, wherein said roller and pad comprise an ultra high molecular weight plastic.
9. The assembly of claim 1, wherein said roller and pad comprise a metal.
10. A multiple-section ladder, comprising:
 - first and second ladder sections;
 - said ladder sections having parallel base rails and rungs connecting to said base rails, said second section being nested within said first section and having a slide plate on a surface of its base rail which faces said first section;
 - a roller assembly having a roller housing wherein at least one roller is rotatably mounted therein, said roller housing further comprising a roller pad having an opening defining an aperture through which said at least one roller extends, and said roller housing being pivotally mounted to said first ladder section at an end distal to its base; and
 - said slide plate of said second section being juxtaposed to said roller assembly of said first ladder section .
11. A ladder according to claim 10, wherein said roller and pad each comprise a dense polymer.
12. A ladder according to claim 11, wherein said housing is mounted pivotally at a point approximately central to the length of the longitudinal axis of said housing.
13. A ladder according to claim 11, wherein said roller is rotatably mounted in said housing on each side of said pivotal mounting point.
14. A ladder according to claim 11, wherein a pair of rollers is rotatably mounted in said housing on each side of said pivotal mounting point.

15. A ladder according to claim 11, wherein a housing as recited therein is mounted adjacent each rail of said first ladder section.